Patient Care Review Pediatrics

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8 FEB 02

Patient

- JK, 3moF, AA/HA
- AirEvac from Ft Bragg on 24 Jan
- C/o emesis, poor po intake, FTT
- Dx FTT
- WRAMC Medical Nutrition Therapy Care Plan- FTT May 2000

FTT

- Failure to Thrive
- In Pediatrics
  - Protein-energy malnutrition
  - Physical & possible developmental retardation in infants and small children

Possible etiologies

- Organic
  - Metabolic, endocrine, cardiac, CNS
- Non-organic
  - Psychological, social

Waterlow's Criteria

- Malnutrition
  - Acute (Wasting)= % Median Wt/Ht
    - 80-89% mild, 70-79% moderate, <70% severe
  - Chronic (Stunting)= %Median Ht/Age
    - 90-94% mild, 85-89% moderate, <85% severe

Diagnostic Criteria

- FTT
  - Wt and Ht <3rd%ile
  - Wt/Ht <5th%ile
  - Or fall-off of growth velocity of two major percentiles within 3-6 months

Symptoms

- Lack of growth
- Sleepy
- Slow or lazy suck

Treatment

- Metabolic
  - Specialized formulas
- Psych/Soc
  - Support
- PT/OT

Prognosis

- Untreated
  - Mortality
- Uncontrolled
  - Stunting, mental retardation
- Treated
  - Improved visceral proteins and optimal growth and development physically and intellectually

Nutritional Implications

- Malnutrition

Past Medical History

- Prior FTT
- Hyperbilirubinemia
- Leukemoid reaction
- PDA murmur
- Elevated TSH

Psycho-Social History

- Father PCSing from Ft Bragg to Ft Campbell, has 2 year old son
- Mom here with patient
- Eligible for WIC and Medicaid

Nutritional History

- Pt breastfed for 1 week
- Enfamil
- Isomil
- Alimentum
- Neocate
- WOMACK- 90 cc Neocate (24 cals/oz) every 3 hours.

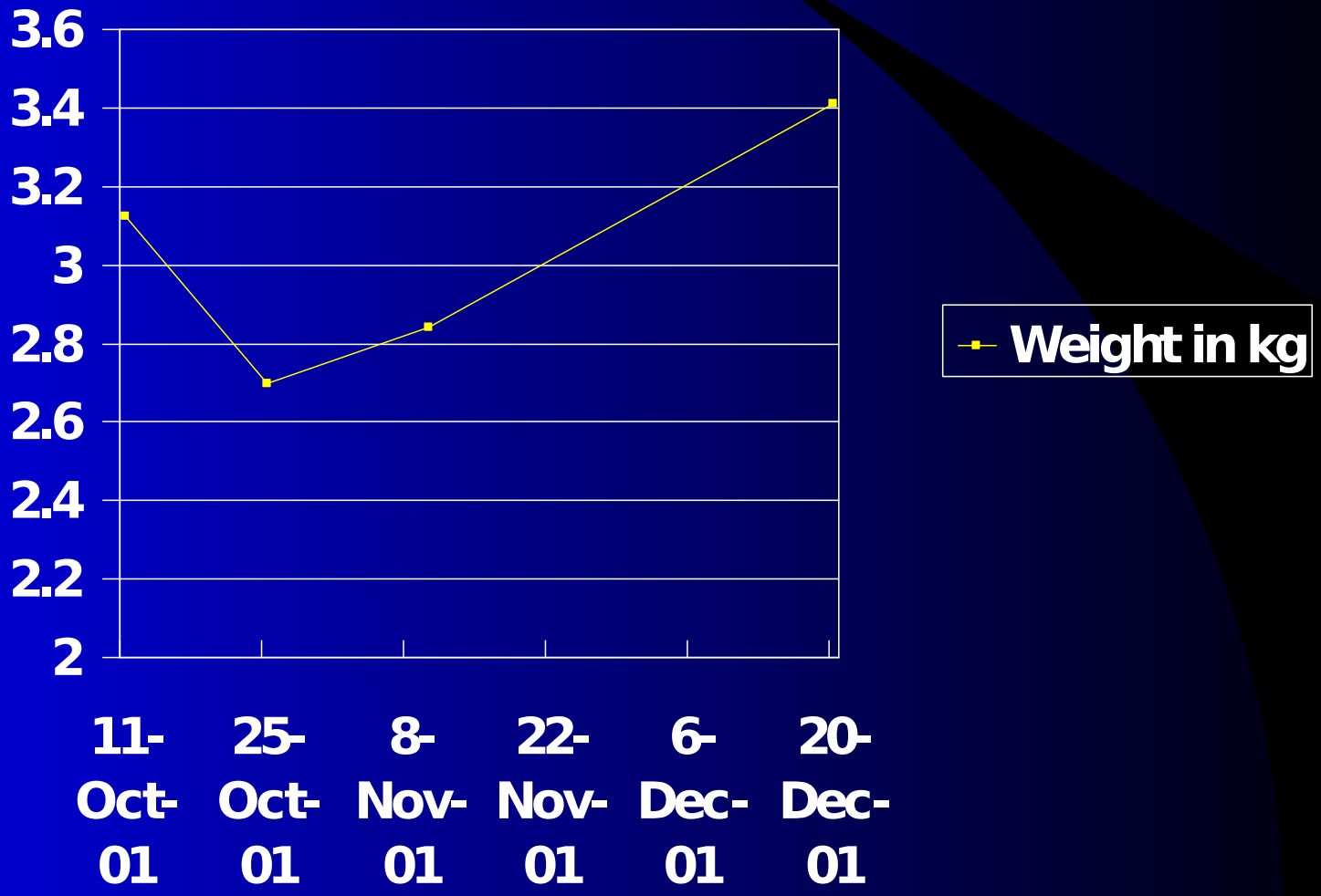
Nutritional History

- Actual
  - 90 cc Neocate (20 cal/oz) Q3.
- First Rec
  - 90 cc Neocate (20 to 22 kcals/oz with Polycose) Q3.
- 2nd Rec
  - 90 cc Neocate (20 to 24 kcals/oz with Polycose) Q3.

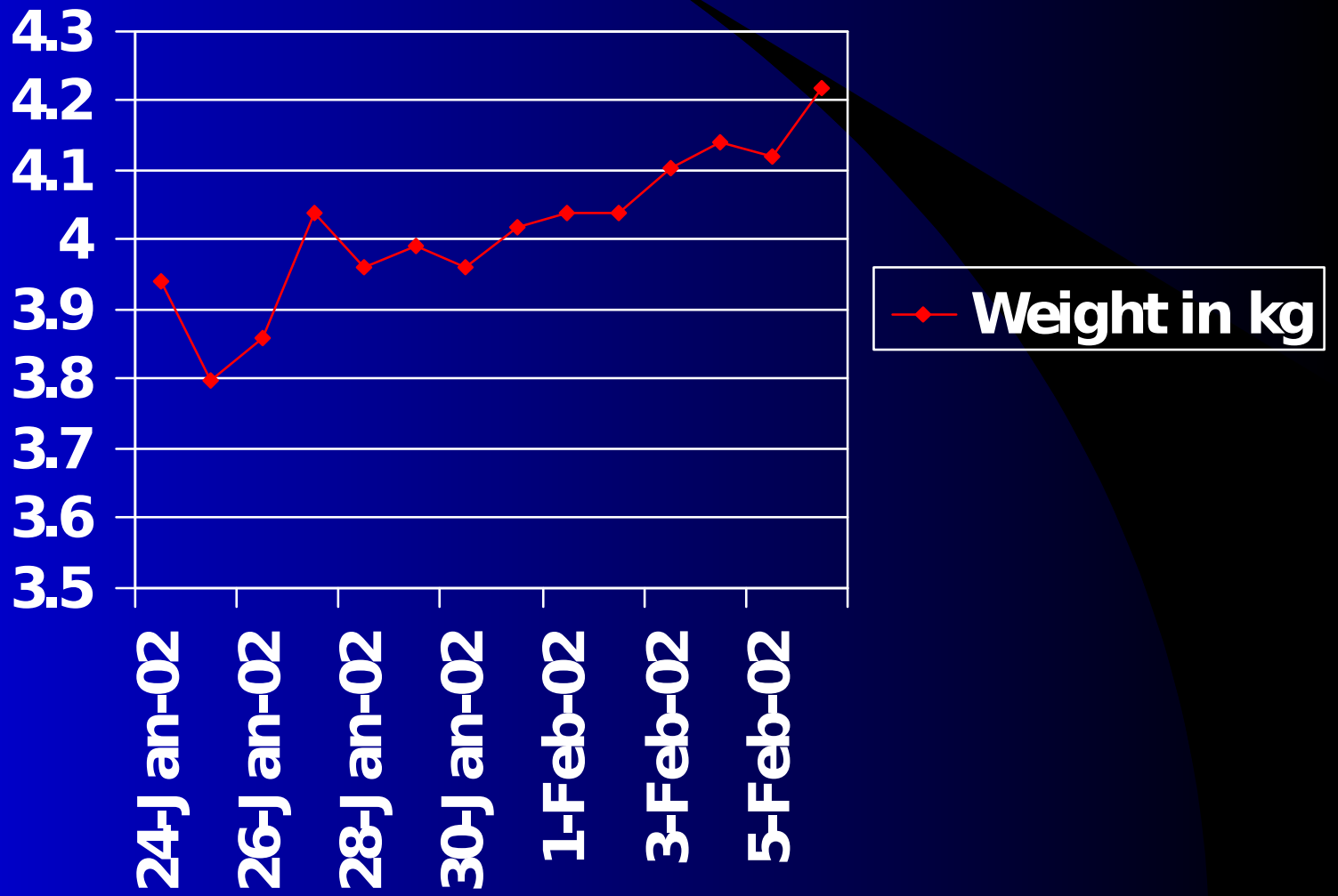
Physical Exam on Admission

- Scaling on legs
- Length: 46 cm Weight: 3.94 kg
- Wt/Length: << 5th%ile
- Length/Age: 10th%ile Ht Age 7 wks
- Wt/Age: <5th%ile Wt Age 3 wks
- HC/Age: 5th%ile
- 81% IBW = 4.8 kg based on 50th%ile wt/ht

Weight during prior admissions



Weight since admission



Medications

- Reglan –Antibiotic
  - ↑gastric emptying
- Erythromycin-Antibiotic
  - N/V, Abdominal cramps, Diarrhea

Labs

- Nutritional significance
  - Prealbumin: 18.3 (20-40)
  - Hgb: 9.1 (9.5-13.5)
  - Hct: 27.4 (29-41)
  - Albumin: 3.3 (3.9-5)
  - Total Protein: 5.6 (6.3-8.2)
- Other labs: metabolic, endocrine, hematological, bone marrow
- MRI, bone scan

Nutritional Diagnostic Statement

- Pt mildly acutely malnourished likely due to prolonged hospitalizations, inadequate intake requiring NG feeds as evidenced by low wt/age (<5th%ile), wt/age (5th%ile), HC/age (5th%ile), and length/age (10th%ile).

Estimated Needs

- Calorie: Catch up equation
  - 133 kcals/kg/day= 525 kcals
- Protein: Weight age RDA
  - 2.2 g Pro/kg/day= 9 g Pro
- Fluid: Maintenance
  - 100 cc/kg= 400 cc water

Goal of Therapy

- To promote weight gain appropriate for catch up growth.

Plan

- 90 cc Neocate (20 to 26 kcal/oz with Polycose) q3
- Po intake for only 20 minutes the NG rest over 40 minutes
- Arrange for WIC services in preparation for possible discharge

Potential Health Outcomes

- Optimal growth and development physically and intellectually
- Improved visceral proteins
- Normalization of anthropometrics

Potential Resources Saved

- Medical
- Social

Questions???